

### **REMARKS**

This Amendment and Response is being submitted in response to the non-final Office Action mailed May 15, 2006. Applicant appreciates the time Examiner took to interview the case with Applicant and Applicant's representative on July 14, 2006.

Before the Amendments above, claims 1-146 were pending in the application. Claim 1 stands provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of co-pending Application No. 10/075,917. Claims 1 and 66 stand rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. Claims 1-16, 32-49, 53-56, 57-94, 96-100, and 102-139 stand rejected under 35 U.S.C. 102(b) as being allegedly anticipated by U.S. 5,682,519 to Saldanha, *et al.* (hereinafter "Saldanha"). Claims 140-146 stand rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Saldanha in view of U.S. 6,608,771 to Jacobsen, *et al.* (hereinafter "Jacobsen"). Claims 17-31, 56, 95, and 101 stand rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Saldanha in view of U.S. 4,876,640 to Shankar (hereinafter "Shankar"). Claims 50-52 stand rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Saldanha in view of U.S. 5,271,019 to Edwards, *et al.* (hereinafter "Edwards"). Claims 58-65, 103-107, 127-136 are objected to but would be allowable upon pending conditions of "101," if rewritten in independent form including all of the limitations of the base claim. Applicant respectfully traverses the Examiner's rejections.

In the amendment above, Applicant has amended claims 58, 103, and 127 to incorporate the limitations of the base claim and any intervening claims. Applicant has cancelled the remaining claims pending in this application to expedite prosecution. Applicant reserves the right to pursue the cancelled claims in a continuation application. No new matter is added by these amendments and support for these amendments may be found in the specification and claims as originally filed. Reconsideration of the claims is respectfully requested in view of the amendments above and remarks below.

**I. Double Patenting**

Claim 1 stands provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of co-pending Application No. 10/075,917. Applicant submits herewith a terminal disclaimer to co-pending Application No. 10/075,917

**II. Claims 1 and 66**

Claims 1 and 66 stand rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. The Office Action states that no practical application can be found. *Office Action*, page 3. However, claim 58, as amended, which depended from claim 1 recites, in part, “a Boolean logic unit, wherein the Boolean logic unit is operable for performing the short-circuit evaluation of Normal Form Boolean expressions/operations” and claim 103, which depended from cancelled claim 66 recites “a boolean co-processor.” A boolean logic unit or boolean co-processor may be used in a variety of practical applications. For example, a boolean logic unit may be used in automotive systems and described in the specification in paragraph 0221. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections under 35 U.S.C. § 101.

**III. Claims 1-57, 66-102, 108-126, and 137-146**

Claims 1-16, 32-49, 53-56, 57-94, 96-100, and 102-139 stand rejected under 35 U.S.C. 102(b) as being allegedly anticipated by Saldanha. Claims 140-146 stand rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Saldanha in view of Jacobsen. Claims 17-31, 56, 95, and 101 stand rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Saldanha in view of Shankar. Claims 50-52 stand rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Saldanha in view of Edwards.

Claims 1-57, 66-102, 108-126, and 137-146 have been cancelled in the amendments above. Thus, the rejection of these claims is moot.

**IV. Claims 58-65, 103-107, 127-136**

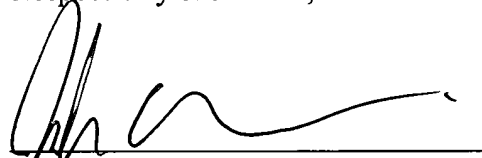
Claims 58-65, 103-107, 127-136 are objected to but would be allowable upon pending conditions of "101," if rewritten in independent form including all of the limitations of the base claim. Applicant has rewritten claims 58, 103, and 127 to incorporate the limitations of all the claims on which each of these claims depends. Applicant respectfully requests that the Examiner withdraw the objections to these claims.

**VI. Conclusion**

Applicant respectfully submits that claims 58-65, 103-107, 127-136 are allowable. A favorable Office Action is respectfully solicited.

Should the Examiner have any comments, questions or suggestions of a nature necessary to expedite the prosecution of the application, or to place the case in condition for allowance, the Examiner is courteously requested to telephone the undersigned at the number listed below.

Respectfully submitted,



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